

WHAT IS CLAIMED IS:

1. A method of cooling a material, said method comprising compressing 1,1,1,3,3-pentafluorobutane as refrigerant in a turbocompressor, and allowing the compressed 1,1,1,3,3-pentafluorobutane to expand in heat exchange relation with the material to be cooled.

2. A method of converting a cooling system including a turbocompressor which uses R11 or R123 as a refrigerant, said method comprising replacing the R11 or R123 with 1,1,1,3,3-pentafluorobutane and increasing the rotational speed of the turbocompressor.

3. A method according to claim 2, wherein the rotational speed is increased by about 4%.

4. In a cooling system comprising a turbocompressor which compresses a refrigerant, the improvement comprising said refrigerant comprising 1,1,1,3,3-pentafluorobutane.

5. A cooling system according to claim 3, wherein said turbocompressor is designed to operate with R11 or R123 as refrigerant, and wherein said refrigerant consists of 1,1,1,3,3-pentafluorobutane.